

CLAIM AMENDMENTS

Claims 1-50 (canceled).

51. (Currently Amended) A method of producing a modulated beam of electromagnetic energy, comprising:

[a] providing a substantially collimated primary beam of electromagnetic energy having a predetermined range of wavelengths;

[b] resolving from the substantially collimated primary beam of electromagnetic energy a substantially collimated primary first resolved beam of electromagnetic energy having substantially a first selected predetermined orientation of a chosen component of the electromagnetic wave field vectors and a substantially collimated primary second resolved beam of electromagnetic energy having substantially a second selected predetermined orientation of a chosen component of the electromagnetic wave field vectors, whereby the first and second selected predetermined orientation of the chosen component of the electromagnetic wave field vectors are different from one another;

[c] forming from the substantially collimated primary first resolved beam of electromagnetic energy and the substantially collimated primary second resolved beam of electromagnetic energy a substantially collimated initial beam of electromagnetic energy having substantially the same selected predetermined orientation of a chosen component of electromagnetic wave field vectors substantially across the substantially collimated initial beam of electromagnetic energy and a substantially uniform flux intensity substantially across the substantially collimated initial beam of electromagnetic energy;

[d] separating the substantially collimated initial beam of electromagnetic energy into two or more substantially collimated separate beams of electromagnetic energy, each of the substantially collimated separate beams of electromagnetic energy having a selected predetermined orientation of a chosen component of electromagnetic wave field vectors;

[e] altering the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of a plurality of portions of each of the substantially collimated separate beams of electromagnetic energy by passing the plurality of portions of each of the substantially collimated separate beams of

electromagnetic energy through a respective one of a plurality of altering means in a single direction whereby the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of the plurality of portions of each of the substantially collimated separate beams of electromagnetic energy is altered in response to a stimulus means by applying a signal means to the stimulus means in a predetermined manner as the plurality of portions of each of the substantially collimated separate beams of electromagnetic energy passes through the respective one of the plurality of means for altering the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors;

[f] combining the substantially collimated altered separate beams of electromagnetic energy into a substantially collimated single collinear beam of electromagnetic energy without substantially changing the altered selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of the plurality of portions of each of the substantially collimated separate beams of electromagnetic energy; and

[g] resolving from the substantially collimated single collinear beam of electromagnetic energy a substantially collimated first resolved beam of electromagnetic energy having substantially a first selected predetermined orientation of a chosen component of electromagnetic wave field vectors and a substantially collimated second resolved beam of electromagnetic energy having substantially a second selected predetermined orientation of a chosen component of electromagnetic wave field vectors, whereby the first and second selected predetermined orientation of the chosen component of the electromagnetic wave field vectors are different from one another.

52. (Original) A method as described in claim 51 wherein step [d] includes separating the substantially collimated initial beam of electromagnetic energy into two or more substantially collimated separate beams of electromagnetic energy whereby each of the substantially collimated separate beams of electromagnetic energy has substantially the same selected predetermined orientation of the chosen component of the electromagnetic wave field vectors substantially across each of the substantially collimated separate beams of electromagnetic energy as that of the other substantially collimated separate beams of electromagnetic energy.

53. (Original) A method as described in claim 52 wherein step [c] includes forming the substantially collimated initial beam of electromagnetic energy further having a rectangular cross sectional area.

54. (Original) A method as described in claim 53 further comprising the step of passing one of the substantially collimated resolved beams of electromagnetic energy to a projection means.

55. (Original) A method as described in claim 52 further comprising the step of adjusting the electromagnetic spectrum of at least one of the substantially collimated separate beams of electromagnetic energy.

56. (Original) A method as described in claim 55 wherein the step of adjusting the electromagnetic spectrum of at least one of the substantially collimated separate beams of electromagnetic energy includes adjusting a predetermined range of wavelengths of at least one of the substantially collimated separate beams of electromagnetic energy.

57. (Original) A method as described in claim 55 wherein the step of adjusting the electromagnetic spectrum of at least one of the substantially collimated separate beams of electromagnetic energy includes adjusting a magnitude of at least one of the substantially collimated separate beams of electromagnetic energy.

58. (Original) A method as described in claim 51 wherein step [d] includes separating the substantially collimated initial beam of electromagnetic energy into two or more substantially collimated separate beams of electromagnetic energy whereby each of the substantially collimated separate beams of electromagnetic energy has a substantially different selected predetermined orientation of the chosen component of the electromagnetic wave field vectors substantially across each of the substantially collimated separate beams of electromagnetic energy from that of the other substantially collimated separate beams of electromagnetic energy.

59. (Original) A method as described in claim 52 further comprising the step of passing one of the substantially collimated primary resolved beams of

electromagnetic energy through a means for changing the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors.

60. (Currently Amended) A method as described in claim 59~~51~~ wherein the step [e] includes of passing one of the substantially collimated ~~separate primary resolved~~ beams of electromagnetic energy through a means for changing the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors includes passing one of the substantially collimated primary resolved beams of electromagnetic energy through a liquid crystal device for changing the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors.

61. (Original) A method as described in claim 52 further comprising the step of passing one of the substantially collimated primary resolved beams of electromagnetic energy through a means for changing a selected predetermined orientation of a chosen component of electromagnetic wave field vectors and changing the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of one of the substantially collimated primary resolved beam of electromagnetic energy to match substantially the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of the other substantially collimated primary resolved beam of electromagnetic energy.

62. (Original) A method as described in claim 52 wherein step [c] further comprises the step of providing one or more reflecting means, each of the reflecting means having means for changing the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors, and reflecting one of the substantially collimated primary resolved beams of electromagnetic energy from one or more of the reflecting means.

63. (Original) A method as described in claim 62 wherein the step of providing one or more reflecting means, each of the reflecting means including one or more planar reflecting surface with a dielectric coating, each planar reflecting surface with a dielectric coating having means for changing the selected predetermined orientation

of the chosen component of the electromagnetic wave field vectors, and reflecting one of the substantially collimated primary resolved beams of electromagnetic energy from one or more of the planar reflecting surfaces with a dielectric coating.

64. (Original) A method as described in claim 62 wherein the step of providing one or more reflecting means, each of the reflecting means including a mirror having a thin film dielectric material, each mirror having a thin film dielectric material having means for changing the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors, and reflecting one of the substantially collimated primary resolved beams of electromagnetic energy from one or more of the mirrors having a thin film dielectric material.

65. (Original) A method as described in claim 52 wherein step [a] includes providing a substantially collimated primary beam of electromagnetic energy further having a substantially uniform flux intensity across substantially the entire primary beam of electromagnetic energy.

66. (Original) A method as described in claim 52 further comprising the step of removing from at least one of the beams of electromagnetic energy at least a predetermined portion of a predetermined range of wavelengths.

67. (Original) A method as described in claim 66 further including directing the removed portions to an absorption means.

68. (Original) A method as described in claim 52 further comprising the step of removing from the substantially collimated primary beam of electromagnetic energy at least a predetermined portion of a predetermined range of wavelengths and directing the removed portions to an absorption means.

69. (Currently Amended) A method of producing a modulated beam of light, comprising:

[a] providing a substantially collimated primary beam of light having a predetermined range of wavelengths;

[b] resolving from the substantially collimated primary beam of light a substantially collimated primary first resolved beam of light having substantially a first selected predetermined orientation of a chosen component of the electric field vectors and a substantially collimated primary second resolved beam of light having substantially a second selected predetermined orientation of a chosen component of the electric field vectors, whereby the first and second selected predetermined orientation of the chosen component of the electric field vectors are different from one another;

[c] forming from the substantially collimated primary first resolved beam of light and the substantially collimated primary second resolved beam of light a substantially collimated initial beam of light having a substantially the same selected predetermined orientation of a chosen component of electric field vectors substantially across the substantially collimated initial beam of light and a substantially uniform flux intensity substantially across the substantially collimated initial beam of light;

[d] separating the substantially collimated initial beam of light into two or more substantially collimated separate beams of light, each of the substantially collimated separate beams of light having a selected predetermined orientation of a chosen component of electric field vectors;

[e] altering the selected predetermined orientation of the chosen component of the electric field vectors of a plurality of portions of each of the substantially collimated separate beams of light by passing the plurality of portions of each of the substantially collimated separate beams of light through a respective one of a plurality of altering means in a single direction whereby the selected predetermined orientation of the chosen component of the electric field vectors of the plurality of portions of each of the substantially collimated separate beams of light is altered in response to a stimulus means by applying a signal means to the stimulus means in a predetermined manner as the plurality of portions of each of the substantially collimated separate beams of electromagnetic energy passes through the respective one of the plurality of means for altering the selected predetermined orientation of the chosen component of the electric field vectors;

[f] combining the substantially collimated altered separate beams of light into a substantially collimated single collinear beam of light without substantially changing the altered selected predetermined orientation of the chosen component of

the electric field vectors of the plurality of portions of each of the substantially collimated separate beams of light; and

[g] resolving from the substantially collimated single collinear beam of light a substantially collimated first resolved beam of light having substantially a first selected predetermined orientation of a chosen component of electric field vectors and a substantially collimated second resolved beam of light having substantially a second selected predetermined orientation of a chosen component of electric field vectors, whereby the first and second selected predetermined orientation of the chosen component of the electric field vectors are different from one another.

70. (Original) A method as described in claim 69 wherein step [d] includes separating the substantially collimated initial beam of light into two or more substantially collimated separate beams of light whereby each of the substantially collimated separate beams of light has substantially the same selected predetermined orientation of the chosen component of the electric field vectors substantially across each of the substantially collimated separate beams of light as that of the other substantially collimated separate beams of light.

71. (Original) A method as described in claim 70 wherein step [c] includes forming the substantially collimated initial beam of light further having a rectangular cross sectional area.

72. (Original) A method as described in claim 71 further comprising the step of passing one of the substantially collimated resolved beams of light to a projection means.

73. (Original) A method as described in claim 70 further comprising the step of adjusting the light spectrum of at least one of the substantially collimated separate beams of light.

74. (Original) A method as described in claim 73 wherein the step of adjusting the light spectrum of at least one of the substantially collimated separate beams of light includes adjusting a predetermined range of wavelengths of at least one of the substantially collimated separate beams of light.

75. (Original) A method as described in claim 73 wherein the step of adjusting the light spectrum of at least one of the substantially collimated separate beams of light includes adjusting the magnitude of at least one of the substantially collimated separate beams of light.

76. (Original) A method as described in claim 69 wherein step [d] includes separating the substantially collimated initial beam of light into two or more substantially collimated separate beams of light whereby each of the substantially collimated separate beams of light has a substantially different selected predetermined orientation of the chosen component of the electric field vectors substantially across each of the substantially collimated separate beams of light as that of the other substantially collimated separate beams of light.

77. (Original) A method as described in claim 70 further comprising the step of passing one of the substantially collimated primary resolved beams of light through a means for changing the selected predetermined orientation of the chosen component of the electric field vectors.

78. (Currently Amended) A method as described in claim 6977 wherein the step [e] includes of passing one of the substantially collimated separate primary resolved beams of light through a means for changing the selected predetermined orientation of the chosen component of the electric field vectors includes passing one of the substantially collimated primary resolved beams of light through a liquid crystal device for changing the selected predetermined orientation of the chosen component of the electric field vectors.

79. (Original) A method as described in claim 70 further comprising the step of passing one of the substantially collimated primary resolved beams of light through a means for changing a selected predetermined orientation of a chosen component of electric field vectors and changing the selected predetermined orientation of the chosen component of the electric field vectors of one of the substantially collimated primary resolved beam of light to match substantially the selected predetermined orientation of the chosen component of the electric field vectors of the other

substantially collimated primary resolved beam of light.

80. (Original) A method as described in claim 70 wherein step [c] further comprises the step of providing one or more reflecting means, each of the reflecting means having means for changing the selected predetermined orientation of the chosen component of the electric field vectors, and reflecting one of the substantially collimated primary resolved beams of light from one or more of the reflecting means.

81. (Original) A method as described in claim 80 wherein the step of providing one or more reflecting means, each of the reflecting means including one or more planar reflecting surface with a dielectric coating, each planar reflecting surface with a dielectric coating having means for changing the selected predetermined orientation of the chosen component of the electric field vectors, and reflecting one of the substantially collimated primary resolved beams of light from one or more of the planar reflecting surfaces with a dielectric coating.

82. (Original) A method as described in claim 80 wherein the step of providing one or more reflecting means, each of the reflecting means including a mirror having a thin film dielectric material, each mirror having a thin film dielectric material having means for changing the selected predetermined orientation of the chosen component of the electric field vectors, and reflecting one of the substantially collimated primary resolved beams of light from one or more of the mirrors having a thin film dielectric material.

83. (Original) A method as described in claim 70 wherein step [a] includes providing a substantially collimated primary beam of light further having a substantially uniform flux intensity across substantially the entire primary beam of light.

84. (Original) A method as described in claim 70 further comprising the step of removing from one or more of the beams of light at least a predetermined portion of a predetermined range of wavelengths.

85. (Original) A method as described in claim 84 further including directing the

removed portions to an absorption means.

86. (Original) A method as described in claim 70 further comprising the step of removing from the substantially collimated primary beam of light at least a predetermined portion of a predetermined range of wavelengths and directing the removed portions to an absorption means.

87. (Original) A method as described in claim 51 wherein step [a] includes producing a primary beam of ultraviolet.

88. (Currently Amended) A system of producing a modulated beam of electromagnetic energy, comprising:

[a] means for providing a substantially collimated primary beam of electromagnetic energy having a predetermined range of wavelengths;

[b] means for resolving from the substantially collimated primary beam of electromagnetic energy a substantially collimated primary first resolved beam of electromagnetic energy having substantially the first selected predetermined orientation of a chosen component of the electromagnetic wave field vectors and a substantially collimated primary second resolved beam of electromagnetic energy having substantially a second selected predetermined orientation of a chosen component of the electromagnetic wave field vectors, whereby the first and second selected predetermined orientation of the chosen component of the electromagnetic wave field vectors are different from one another;

[c] means for forming from the substantially collimated primary first resolved beam of electromagnetic energy and the substantially collimated primary second resolved beam of electromagnetic energy a substantially collimated initial beam of electromagnetic energy having substantially the same selected predetermined orientation of a chosen component of electromagnetic wave field vectors substantially across the substantially collimated initial beam of electromagnetic energy and a substantially uniform flux intensity substantially across the substantially collimated initial beam of electromagnetic energy;

[d] means for separating the substantially collimated initial beam of electromagnetic energy into two or more substantially collimated separate beams of electromagnetic energy, each of the substantially collimated separate beams of

electromagnetic energy having a selected predetermined orientation of a chosen component of electromagnetic wave field vectors;

[e] means for altering the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of a plurality of portions of each of the substantially collimated separate beams of electromagnetic energy by passing the plurality of portions of each of the substantially collimated separate beams of electromagnetic energy through a respective one of a plurality of altering means in a single direction whereby the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of the plurality of portions of each of the substantially collimated separate beams of electromagnetic energy is altered in response to a stimulus means by applying a signal means to the stimulus means in a predetermined manner as the plurality of portions of each of the substantially collimated separate beams of electromagnetic energy passes through the respective one of the plurality of means for altering the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors;

[f] means for combining each of the substantially collimated altered separate beams of electromagnetic energy with the other substantially collimated altered separate beams of electromagnetic energy into a substantially collimated single collinear beam of electromagnetic energy without substantially changing the altered selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of the plurality of portions of each of the substantially collimated separate beams of electromagnetic energy; and

[g] means for resolving from the substantially collimated single collinear beam of electromagnetic energy a substantially collimated first resolved beam of electromagnetic energy having substantially a first selected predetermined orientation of a chosen component of electromagnetic wave field vectors and a substantially collimated second resolved beam of electromagnetic energy having substantially a second selected predetermined orientation of a chosen component of electromagnetic wave field vectors, whereby the first and second selected predetermined orientation of the chosen component of the electromagnetic wave field vectors are different from one another.

89. (Currently Amended) A system as described in claim 88 wherein the means

ofstep [d] includes means for separating the substantially collimated initial beam of electromagnetic energy into two or more substantially collimated separate beams of electromagnetic energy whereby each of the substantially collimated separate beams of electromagnetic energy has substantially the same selected predetermined orientation of the chosen component of the electromagnetic wave field vectors substantially across each of the substantially collimated separate beams of electromagnetic energy as that of the other substantially collimated separate beams of electromagnetic energy.

90. (Currently Amended) A system as described in claim 89 wherein the means ofstep [c] includes means for forming the substantially collimated initial beam of electromagnetic energy further having a rectangular cross sectional area.

91. (Currently Amended) A system as described in claim 90 further comprising the step of means for passing one of the substantially collimated resolved beams of electromagnetic energy from step [g] to a projection means.

92. (Currently Amended) A system as described in claim 89 further comprising the step of means for adjusting the electromagnetic spectrum of at least one of the substantially collimated separate beams of electromagnetic energy.

93. (Currently Amended) A system as described in claim 92 wherein the step of means for adjusting the electromagnetic spectrum of at least one of the substantially collimated separate beams of electromagnetic energy includes means for adjusting a predetermined range of wavelengths of at least one of the substantially collimated separate beams of electromagnetic energy.

94. (Currently Amended) A system as described in claim 92 wherein the step of means for adjusting the electromagnetic spectrum of at least one of the substantially collimated separate beams of electromagnetic energy includes means for adjusting a magnitude of at least one of the substantially collimated separate beams of electromagnetic energy.

95. (Currently Amended) A system as described in claim 88 wherein the means

of step [d] includes means for separating the substantially collimated initial beam of electromagnetic energy into two or more substantially collimated separate beams of electromagnetic energy whereby each of the substantially collimated separate beams of electromagnetic energy has a substantially different selected predetermined orientation of the chosen component of the electromagnetic wave field vectors substantially across each of the substantially collimated separate beams of electromagnetic energy as that of the other substantially collimated separate beams of electromagnetic energy.

96. (Currently Amended) A system as described in claim 89 further comprising ~~the step of~~ means for passing one of the substantially collimated primary resolved beams of electromagnetic energy through a means for changing the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors.

97. (Currently Amended) A system as described in claim 8896 wherein the means of [e] includes ~~step of~~ means for passing one of the substantially collimated separate primary resolved beams of electromagnetic energy through a ~~means for changing the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors includes means for passing one of the substantially collimated primary resolved beams of electromagnetic energy through a liquid crystal device for changing the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors.~~

98. (Currently Amended) A system as described in claim 89 further comprising ~~the step of~~ means for passing one of the substantially collimated primary resolved beams of electromagnetic energy through a means for changing a selected predetermined orientation of a chosen component of electromagnetic wave field vectors and changing the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of one of the substantially collimated primary resolved beam of electromagnetic energy to match substantially the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of the other substantially collimated primary resolved beam of electromagnetic energy.

99. (Currently Amended) A system as described in claim 98 wherein step [c] further comprises ~~the step of~~ means for reflecting one of the substantially collimated primary resolved beams of electromagnetic energy from one or more reflecting means, each of the reflecting means having means for changing the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors.

100. (Currently Amended) A system as described in claim 98 wherein the ~~step of~~ means for reflecting one of the substantially collimated primary resolved beams of electromagnetic energy from one or more reflecting means, each of the reflecting means having means for changing the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors includes means for reflecting one of the substantially collimated primary resolved beams of electromagnetic energy from one or more planar reflecting surface with a dielectric coating, each planar reflecting surface with a dielectric coating having means for changing the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors.

101. (Currently Amended) A system as described in claim 99 wherein the ~~step of~~ means for reflecting one of the substantially collimated primary resolved beams of electromagnetic energy from one or more reflecting means, each of the reflecting means having means for changing the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors includes means for reflecting one of the substantially collimated primary resolved beams of electromagnetic energy from one or more mirrors having a thin film dielectric material, each mirrors having a thin film dielectric material having means for changing the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors.

102. (Currently Amended) A system as described in claim 99 wherein the means of step [a] includes the substantially collimated primary beam of electromagnetic energy further having a substantially uniform flux intensity across substantially the entire primary beam of electromagnetic energy.

103. (Currently Amended) A system as described in claim 99 further comprising the step of means for removing from at least one of the beams of electromagnetic energy at least a predetermined portion of a predetermined range of wavelengths.

104. (Original) A system as described in claim 103 further including directing the removed portions to an absorption means.

105. (Currently Amended) A system as described in claim 89 further comprising the step of means for removing from the substantially collimated primary beam of electromagnetic energy at least a predetermined portion of a predetermined range of wavelengths and directing the removed portions to an absorption means.

106. (Currently Amended) A system of producing a modulated beam of light, comprising:

[a] means for providing a substantially collimated primary beam of light having a predetermined range of wavelengths;

[b] means for resolving from the substantially collimated primary beam of light--a substantially collimated primary first resolved beam of light having substantially a first selected predetermined orientation of a chosen component of the electric field vectors and a substantially collimated primary second resolved beam of light having substantially a second selected predetermined orientation of a chosen component of the electric field vectors, whereby the first and second selected predetermined orientation of the chosen component of the electric field vectors are different from one another;

[c] means for forming from the substantially collimated primary first resolved beam of light and the substantially collimated primary second resolved beam of light a substantially collimated initial beam of light having substantially the same selected predetermined orientation of a chosen component of electric field vectors substantially across the substantially collimated initial beam of light and a substantially uniform flux intensity substantially across the substantially collimated initial beam of light;

[d] means for separating the substantially collimated initial beam of light into two or more substantially collimated separate beams of light, each of the

substantially collimated separate beams of light having a selected predetermined orientation of a chosen component of electric field vectors;

[e] means for altering the selected predetermined orientation of the chosen component of the electric field vectors of a plurality of portions of each of the substantially collimated separate beams of light by passing the plurality of portions of each of the substantially collimated separate beams of light through a respective one of a plurality of altering means in a single direction whereby the selected predetermined orientation of the chosen component of the electric field vectors of the plurality of portions of each of the substantially collimated separate beams of light is altered in response to a stimulus means by applying a signal means to the stimulus means in a predetermined manner as the plurality of portions of each of the substantially collimated separate beams of electromagnetic energy passes through the respective one of the plurality of means for altering the selected predetermined orientation of the chosen component of the electric field vectors;

[f] means for combining the substantially collimated altered separate beams of light into a substantially collimated single collinear beam of light without substantially changing the altered selected predetermined orientation of the chosen component of the electric field vectors of the plurality of portions of each of the substantially collimated separate beams of light; and

[g] means for resolving from the substantially collimated single collinear beam of light a substantially collimated first resolved beam of light having substantially a first selected predetermined orientation of a chosen component of electric field vectors and a substantially collimated second resolved beam of light having substantially a second selected predetermined orientation of a chosen component of electric field vectors, whereby the first and second selected predetermined orientation of the chosen component of the electric field vectors are different from one another.

107. (Original) A system as described in claim 106 wherein the means for separating the substantially collimated initial beam of light into two or more substantially collimated separate beams of light includes means for producing two or more substantially collimated separate beams of light each having substantially the same selected predetermined orientation of the chosen component of the electric field vectors substantially across each of the substantially collimated separate beams of

light as that of the other substantially collimated separate beam or beams of light.

108. (Original) A system as described in claim 107 wherein the means for forming the substantially collimated initial beam of light further includes means for forming the substantially collimated initial beam having a rectangular cross sectional area.

109. (Original) A system as described in claim 108 further comprising means for passing one of the substantially collimated resolved beams of light to a projection means.

110. (Original) A system as described in claim 107 further comprising means for adjusting the light spectrum of at least one of the substantially collimated separate beams of light.

111. (Original) A system as described in claim 110 wherein means for adjusting the light spectrum of at least one of the substantially collimated separate beams of light includes means for adjusting a predetermined range of wavelengths of at least one of the substantially collimated separate beams of light.

112. (Original) A system as described in claim 110 wherein means for adjusting the light spectrum of at least one of the substantially collimated separate beams of light includes means for adjusting the magnitude of at least one of the substantially collimated separate beams of light.

113. (Original) A system as described in claim 106 wherein the means for separating the substantially collimated initial beam of light into two or more substantially collimated separate beams of light includes means for producing two or more substantially collimated separate beams of light each having a substantially different selected predetermined orientation of the chosen component of the electric field vectors substantially across each of the substantially collimated separate beams of light as that of the other substantially collimated separate beam or beams of light.

114. (Original) A system as described in claim 107 further comprising means for passing one of the substantially collimated primary resolved beams of light through a

means for changing the selected predetermined orientation of the chosen component of the electric field vectors.

115. (Currently Amended) A system as described in claim 106114 wherein means of [e] includes means for passing one of the substantially collimated separate primary resolved beams of light through a ~~means for changing the selected predetermined orientation of the chosen component of the electric field vectors~~ includes means for passing one of the substantially collimated primary resolved beams of light through a liquid crystal device for changing the selected predetermined orientation of the chosen component of the electric field vectors.

116. (Original) A system as described in claim 107 further comprising means for passing one of the substantially collimated primary resolved beams of light through a means for changing the selected predetermined orientation of a chosen component of electric field vectors and changing the selected predetermined orientation of the chosen component of the electric field vectors of one of the substantially collimated primary resolved beam of light to match substantially the selected predetermined orientation of the chosen component of the electric field vectors of the other substantially collimated primary resolved beam of light.

117. (Original) A system as described in claim 107 wherein the means for forming the substantially collimated primary first resolved beam and second resolved beam includes means for reflecting one of the substantially collimated primary resolved beams of light from one or more reflecting means, each of the reflecting means having means for changing the selected predetermined orientation of the chosen component of the electric field vectors.

118. (Original) A system as described in claim 117 wherein means for reflecting one of the substantially collimated primary resolved beams of light from one or more reflecting means, each of the reflecting means having means for changing the selected predetermined orientation of the chosen component of the electric field vectors, includes means for reflecting one of the substantially collimated primary resolved beams of light from one or more planar reflecting surfaces having a dielectric coating, each planar reflecting surface having a dielectric coating including means for

changing the selected predetermined orientation of the chosen component of the electric field vectors.

119. (Original) A system as described in claim 117 wherein the means for reflecting one of the substantially collimated primary resolved beams of light from one or more reflecting means, each of the reflecting means having means for changing the selected predetermined orientation of the chosen component of the electric field vectors, includes means for reflecting one of the substantially collimated primary resolved beams of light from one or more mirrors having a thin film dielectric material, each mirror having a thin film dielectric material including means for changing the selected predetermined orientation of the chosen component of the electric field vectors.

120. (Original) A system as described in claim 107 wherein the means for providing a substantially collimated primary beam of light includes means for providing a substantially collimated primary beam of light having a substantially uniform flux intensity across substantially the entire primary beam of light.

121. (Original) A system as described in claim 107 further comprising means for removing from at least one of the beams of light at least a predetermined portion of a predetermined range of wavelengths.

122. (Original) A system as described in claim 121 further comprising means for directing the removed portions to an absorption means.

123. (Original) A system as described in claim 107 further comprising means for removing from the substantially collimated primary beam of light at least a predetermined portion of a predetermined range of wavelengths and directing the removed portions to an absorption means.

124. (Original) A system as described in claim 88 wherein the means for providing a substantially collimated primary beam includes producing a primary beam of ultraviolet.

Claims 125-438 (canceled).